

Navy Personnel Research and Development Center

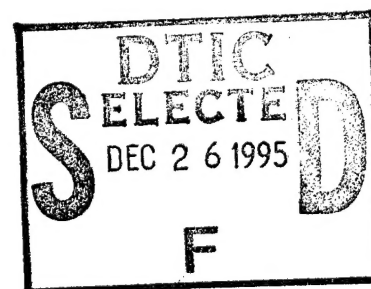
San Diego, California 92152-7250

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November 1995



Annotated Bibliography of Publications on Women in the Navy



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Compiled by
Patricia J. Thomas

Annotated Bibliography of Publications on Women in the Navy

Reviewed, approved,
and released by
Kathleen Moreno
Director,
Personnel and
Organizational
Assessment

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13. ABSTRACT (Maximum 200 words) The Navy Personnel Research and Development Center (NAVPERSRANDCEN) has been conducting research on Navy and Marine Corps women since 1975. The early studies tended to be comparative, responding to questions about how women's career behavior differed from or was similar to men's. As regulations and laws applying solely to women changed, new research issues arose, such as the integration of women into formerly all-male environments, the impact of women on the military mission, and sexual harassment. This document is the first bibliography of reports, journal articles, and book chapters that have been published by researchers at NAVPERSRANDCEN on military women in the Department of the Navy. The publication dates range from May 1976 to December 1994. Approximately 50 reports and articles are abstracted and indexed by subject area so that readers can locate publications that address their interests.					
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Foreword

The purpose of this publication is to provide a single source of information on research performed at the Navy Personnel Research and Development Center that focused on women in the Navy. Approximately 50 abstracts are presented in the pages that follow, all of which were sponsored by the Chief of Naval Personnel over an 18-year period.

The author wishes to acknowledge FC1(SW) Kevin Lennon, who edited the abstracts, and Jack Edwards, Carol Newell, Paul Rosenfeld, and Marie Thomas who provided summaries of their publications.

KATHLEEN MORENO, Director
Personnel and Organizational
Assessment Department

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Introduction

The Navy Personnel Research and Development Center (NAVPERSRANDCEN) has been conducting research on Navy and Marine Corps women since 1975. The early studies tended to be comparative, responding to questions about how women's career behavior differed from or was similar to men's. As regulations and laws applying solely to women changed, new research issues arose, such as the integration of women into formerly all-male environments, the impact of women on the military mission, and sexual harassment.

This is the first bibliography of reports, journal articles, and book chapters that have been published by researchers at NAVPERSRANDCEN on military women in the Department of the Navy. The publication dates range from May 1976 to December 1994. The summaries have been arranged sequentially, starting with the most recently published research. Approximately 50 reports and articles are referenced.

This bibliography is indexed by subject area so that readers can locate publications that address their interests. Each entry is followed by a summary and, whenever possible, the Defense Technical Information Center (DTIC) Accession Number. Reports may be requested from DTIC using these numbers.

Annotated Bibliography of Publications on Women in the Navy

NPRDC-TR-94-10
May 1994

Thomas, P. J.
Perry, Z. A.
David, K. M.

1. *Fitness reports of Naval warfare officers: A search for gender differences.*

The research described in this report investigated whether gender differences are evident in the narrative section of officers' performance evaluations. The fitness reports of matched samples of women and men were analyzed. No evidence was found of sexist language in the evaluations of women warfare officers. Gender differences favoring men were found in recommendations and ratings of leadership, however.

NPRDC-TN-94-14
January 1994

Thomas, M. D.

2. *Utilization of pregnant enlisted women transferred off ships.*

This study investigated how shore commands assign women transferred off ships due to pregnancy. A structured interview was used to collect data from supervisors and a survey was administered to pregnant women. Key findings were that about half of the women were performing tasks appropriate to their rating. Supervisors felt that pregnant women were doing useful jobs. Few women reported negative treatment from their supervisors or co-workers.

NPRDC-TR-94-2
December 1993

Culbertson, A. L.
Rosenfeld, P.
Newell, C. E.

3. *Sexual harassment in the active-duty Navy: Findings from the 1991 Navy-wide survey*

This report summarizes the sexual harassment findings from the second administration (1991) of the Navy Equal Opportunity/Sexual Harassment Survey (NEOSH). This survey assesses the occurrence, types, and consequences of sexual harassment for active-duty personnel. It also measures perceptions concerning organizational climate and leader's support in eliminating harassment in the Navy. Forty-four percent of female enlisted and 33% of female officer respondents indicated that they had been sexually harassed during the 1-year survey period. Very small percentages of male enlisted (8%) and male officer (2%) respondents reported sexual harassment. These findings indicate a statistically significant increase from the 1989 NEOSH Survey for two groups: female officers and male enlisted personnel. Details about the type of harassment, characteristics of victims and perpetrators, and actions taken are compared between the 1989 and 1991 surveys. In addition, explanations for the differences in the occurrence rates found by various military surveys are addressed.

NPRDC-TN-94-7
October 1993

Newell, C. E.
Thomas, P. J.

4. *Comparison of permanent change of station costs for women and men transferred prematurely from ships*

This report assesses whether transferring pregnant women from ships costs the Navy more than transferring men and nonpregnant women. Using information extracted from the Enlisted Master Record, the direct cost of permanent change of station (PCS) transfer prior to rotation was compared for men and women. An estimate of PCS costs, if ships were not gender-integrated, was also calculated. The study found that (1) proportionately more women than men prematurely transferred off ships, (2) pregnant women had the most sea duty time remaining when they rotated, (3) men had the highest average PCS costs, and (4) PCS costs for gender integrated ships were less than if they had been all-male.

NPRDC-TR-93-3
March 1993
AD-A264 161

Thomas, P. J.
Thomas, M. D.
Robertson, P.

5. *Absences of Navy enlisted personnel: A search for gender differences*

This report compares the lost time of Navy enlisted women and men, and determines whether single parents lose more time than other personnel. A secondary goal was to replicate a 1978 study of absenteeism behavior. Two separate investigations were conducted. The first relied on work diaries that were completed by immediate supervisors at 50 commands and the second consisted of analyzing lost time that was recorded in personnel and medical records (as done a decade earlier). Key findings were: (1) No gender difference in lost time was found in ships, aviation squadrons, and four of the seven shore commands in the sample, while women lost an average of 17 minutes more a day than men in the three types of shore commands due to pregnancy and postpartum convalescent leave; (2) parents lost more time than nonparents in two command types, averaging 11 minutes a day; (3) married personnel lost 10 minutes more a day than single personnel in one command type and single personnel lost 9 more minutes than married personnel in another; (4) single parents did not have significantly more lost time than married parents; and (5) as was found in 1978, men had more recorded days absent than women due to their higher rate of disciplinary events.

NPRDC-TR-92-14
May 1992

Rosenfeld, P.
Culbertson, A. L.
Booth-Kewley, S.
Magnusson, P.

6. *Assessment of equal opportunity climate: Results of the 1989 Navy-wide survey*

This report describes the equal opportunity results from the initial administration of Navy Equal Opportunity/Sexual Harassment Survey (NEOSH). The NEOSH Survey provides Navy policy makers with an accurate baseline measure of equal

opportunity (EO) climate and sexual harassment among active duty Navy personnel. The NEOSH was administered to a random sample ($N = 5,619$, response rate = 60%) of active duty Navy officers and enlisted personnel stratified by race/ethnic group and gender. Among the major results of the 1989 administration of the NEOSH are: (1) Navy personnel as a whole had positive EO climate perceptions; (2) white male officers consistently reported the most positive perceptions of Navy EO climate (the differences in EO perceptions between male and female officers were typically larger than male and female enlisted personnel); (3) blacks, particularly black enlisted females, were the least positive about EO; (4) perceptions of fairness in discipline were lowest among blacks; and (5) Hispanic EO perceptions consistently fell between those of whites and blacks and typically were closer to whites.

NPRDC-TR-92-11
March 1992
AD-A248 546

Culbertson, A. L.
Rosenfeld, P.
Booth-Kewley, S.
Magnusson, P.

7. *Assessment of sexual harassment in the Navy: Results of the 1989 Navy-wide survey*

This report describes the sexual harassment (SH) portion of the 1989 NEOSH Survey. A stratified sample of active duty enlisted and officer personnel received the survey. Completed questionnaires were returned by 5,619 personnel (60% response rate). Post stratification weighting by paygrade, gender, and racial/ethnic group was performed to make the respondents representative of their populations in the Navy. The survey found that 42% of female enlisted and 26% of female officers reported being sexually harassed during the 1-year survey period while on duty, or on base or ship while off duty. Very small percentages of the male enlisted (4%) and male officers (1%) reported being sexually harassed. Generally, as the type of harassment became more severe in nature, its reported occurrence and frequency decreased. Six percent of female enlisted respondents and 1% of female officer respondents reported experiencing the most serious form of sexual harassment, actual or attempted rape or assault. Characteristics of the perpetrators of sexual harassment were analyzed, along with victims' actions after the harassment, and the impact of the experience on their perceptions of the Navy, their command, and themselves.

NPRDC-TN-92-8
February 1992
AD-A246 709

Thomas, P. J.
Thomas, M. D.

8. *Impact of pregnant women and single parents upon Navy personnel systems*

This report reviews policies created to manage pregnant women and single parents, and evaluates the impact of these two groups on recruitment, assignment, and separations. In addition, the

policies at housing offices, child development centers, and family service centers regarding single parents and pregnant women are investigated. Key findings were: (1) single parents and pregnant women had very little impact upon recruit training; (2) detailers considered military-married-to-military personnel more time consuming to assign than either single parents or pregnant women; (3) pregnant women were over represented among personnel returned early from overseas but cost less to move than other personnel; (4) single parents were more likely than married parents to receive a humanitarian transfer and hardship discharge, and single women were more apt to be separated for pregnancy than married women; (5) less than 20% of single parents had a Dependent Care Certificate; and (6) at most locations visited, children of single parents were not given priority placement in Child Development Centers, nor were housing offices at these locations treating single parents or pregnant women preferentially.

NPRDC-TN-92-4
December 1991
AD-A243 680

Thomas, M. D.
Thomas, P. J.

*International Journal of
Intercultural Relations,*
15(3), 407-426 (1991)

Rosenfeld, P.
Thomas, M. D.
Edwards, J. E.
Thomas, P. J.

NPRDC-TN-91-5
March 1991
AD-A234 503

Thomas, M. D.
Thomas, P. J.
McClintock, V.

9. Population statistics: Navy parents and children

This report presents estimates of the numbers of Navy parents and Navy dependent children in 1990. These estimates are provided in tables for officers and enlisted separately, and reflect marital status of parents and age of children. The primary data source for officers was the 1990 Navy Personnel Survey. Most enlisted data were derived from the 1990 Survey of Navy Women and Survey of Navy Men. The most recently available Enlisted Master Record Extract and Officer Master File were utilized as sources of data for Navy-wide demographics.

10. Navy research into race, ethnicity, and gender issues: A historical review

This paper reviews 20 years of Navy Personnel Research and Development Center research relating to equal opportunity (EO) in the Navy. Four main themes are reviewed: EO climate, changing roles for Navy women, assessment of potential bias in Navy discipline, and Hispanic representation in Navy's civilian workforce. Earlier research (e.g., R. T. Kelley, 1970) provides insights into ways EO should be approached in the 1990s.

11. Pregnant enlisted women in Navy work centers

This report documents an effort to determine the amount of time lost due to pregnancy and to assess perceptions of supervisors and their pregnant subordinates regarding the effect of pregnancy on the work place. Data were collected from pregnant enlisted women receiving medical care at San Diego

and Tidewater area Navy prenatal clinics using a structured interview. A special purpose survey was sent to the current and former supervisors of the interviewed women. Key findings include: (1) lost time due solely to pregnancy amounted to 1 day per month per pregnant woman, (2) the impact of pregnancy on the work center and on the command was seen as greater on ships than at most shore commands, (3) until the third trimester, most women continued to work normal shifts and hours, and (4) most co-workers and supervisors responded positively to the news of pregnancy.

NPRDC-TR-90-1
October 1989
AD-A214 904

Thomas, P. J.
Edwards, J. E.

12. *Incidence of pregnancy and single parenthood among enlisted personnel in the Navy*

This report describes the first phase of a 3-year research project, the purpose of which was to estimate the number of pregnant women and single parents in the Navy. A special purpose survey was designed and mailed to a sample of approximately 9,200 enlisted personnel under anonymous conditions. In the analysis, response frequencies were weighted to develop estimates that would be representative of the enlisted force of each gender. In addition, comparisons were made of the responses of subgroups of interest. The major findings were that: (1) pregnancy rates of married and unmarried Navy women were similar to their civilian age cohorts; (2) pregnancy rates were highest during the first enlistment and most of these pregnancies were unplanned; (3) women in ships had lower pregnancy rates than their peers ashore; (4) single parenthood was more typical of personnel in second or subsequent enlistments than among first termers; and (5) single parenthood rates were lower among men than women, but numerically there were more male than female single parents in the Navy.

NPRDC-TN-89-23
June 1989
AD-A210 094

Thomas, M. D.
Lawson, J.

13. *The effects of sex education in the United States*

Despite the widespread availability of sex education programs in the United States, the rate of unplanned pregnancies among women continues to rise, a trend reflected in the number of Navy women who become pregnant during their first enlistment. This report consists of a literature review conducted to identify the major variables influencing pregnancy and birth rates among young women. The study also evaluated the effectiveness of traditional sex education programs in reducing the rate of unplanned pregnancy. Traditional classroom sex education was shown to increase knowledge of sexual subjects and to change attitudes, but had little or no effect on sexual activity, contraceptive use, or teenage pregnancy. The school-based clinic is a promising model that the Navy might, in part, emulate as an intervention strategy to prevent unplanned pregnancies in Navy enlisted women.

Elmsford, NY: Pergamon-
Brassey's (1986)

Thomas, P. J.

14. **From Yeomanettes to WAVES to women in the Navy.**
In D. R. Segal & H. W. Sinaiko (Eds.), *Life in the rank
and file: Enlisted men and women in the Armed Forces
of the United States, Australia, Canada, and the United
Kingdom*

This book chapter outlines the developing role of enlisted women in the Navy. It discusses women's initial experiences as yeomen during WWI, the establishment of the Women Accepted for Voluntary Emergency Service (WAVES) during WWII, and finally their present permanent role in the U.S. Navy. Gender differences in background and career behavior are addressed, as well as the motives and attitudes of Navy women concerning enlistment, reenlistment, and leaving the Navy. Advantages and disadvantages to the Navy of utilizing women are presented. Finally, women's role in the Navy of the 1990s is discussed.

NPRDC-TR-86-9
(Limited Distribution)
February 1986

Royle, M. H.
Molof, M. J.
Winchell, J. D.
Gerrard, M.

15. *Development of a pilot sex education program for
enlisted Marines*

This report describes a survey administered to a sample of 41 women and 50 men in their first enlistments, and to 101 women and 119 men during recruit training. The survey contained items measuring Marines' knowledge of the biological processes of conception and contraception, their knowledge and attitudes toward specific contraceptives, their values and attitudes toward sex and contraception, their sexual and contraceptive histories both before and after they entered the Marine Corps, and their family plans and attitudes toward parenting while in the Marine Corps. The findings indicate that: (1) both sexes demonstrated a lack of knowledge of effective contraception; (2) respondents had generally positive attitudes toward contraception; (3) women were less likely than men to be risk-takers and more likely to take responsibility for using contraception; (4) sizable numbers of men and women had attitudes reflecting discomfort with sexuality, lacked ability to talk about their problems, and lacked the assertiveness needed for effective contraceptive use; and (5) reported patterns of sexual activity and contraceptive use suggest that many Marines are at risk for unplanned pregnancies.

NPRDC-TR-86-7
December 1985
AD-A162 537

Royle, M. H.

16. *Factors affecting attrition among Marine Corps women*

This report describes a survey of a representative sample of the United States Marine Corps (USMC) women in their first enlistment and their supervisors. The purpose was to identify background factors and experiences that might be related to

attrition. Women who attrited were classified into three types: those who were pregnant with a future interest in the Marine Corps, those pregnant with no future interest, and those who left for reasons other than pregnancy. Different factors predicted each type of attrition. Across attrition types, the most important factors were supervisor and work group relationships, family and career orientation, and management of stress. To help decrease attrition among women, the report recommends that the Marine Corps discourage the most traditional women from enlisting, help women develop coping skills, provide sex education, and improve work group climate as well as the climate toward women as a whole in the USMC.

NPRDC-TR-85-32
July 1985

Gerrard, M.
Royle, M. H.

17. Predicting pregnancy and pregnancy attrition in first term Marine Corps women

This report provides data on traditional family/career orientation, feelings of isolation, pregnancy status, and dissatisfaction with the U.S. Marine Corps (USMC), collected from 610 first term enlisted women as part of a larger attrition survey. Follow-up data on the attrition status and number of dependents of these women were collected 18 months later. Exploratory factor analyses and internal reliability analyses were used to reduce the 93 items potentially measuring these traits to 17 scales that measured aspects of traditionality, isolation, and dissatisfaction with the Marine Corps. These scales were then used in a multivariate analysis of variance to identify differences between pregnant and nonpregnant women at the time of the survey, and to predict who would become a pregnant attrite. The findings were that: (1) Women who were pregnant at the time of the survey had more traditional gender role orientations, felt more isolated, and were less satisfied with the Marine Corps than were women who were not pregnant; (2) women who attrited when pregnant were less committed to a career outside the home than were those who became pregnant and remained in the USMC (on measures that were gathered prior to the pregnancy); and (3) factors associated with attrition differed between married women and single women.

NPRDC-TN-86-1
November 1985
AD-A162 781

Robertson, D. W.
Trent, T.

18. Documentation of muscularly demanding job tasks and validation of an occupational strength test battery (STB)

This report documents the validation of a strength test battery (STB) on several muscularly demanding occupational tasks of common shipboard and occupation-specific duties. A dynamometer-measured armpull was the best correlate of the STB. An "impact analysis" procedure was also developed so that policy makers could determine the effect of a STB cut-score

on the percentage of men or women that would be excluded from entering a particular job.

NPRDC-TR-84-57
September 1984
AD-A146 722

Kerce, E. W.
Royle, M. H.

19. *First-term enlisted Marine Corps women: Their backgrounds and experiences*

This report details the results of a survey administered to a representative sample of Marine Corps women in their first enlistment concerning their backgrounds and experiences. The typical young woman Marine is interested in combining a career with marriage and a family. The majority did clerical work and were rated as above average performers. Although negative attitudes toward women and instances of sexual harassment were reported, most women experienced acceptance on the job. Supervisors reported that having a woman in the group had a positive effect on the group's attitudes toward women in the Marine Corps. More traditional women were less satisfied and adjusted than less traditional women, particularly in nontraditional settings.

NPRDC-TR-84-6
November 1983
AD-A136 899

Thomas, P. J.
Greebler, C. S.

20. *Men and women in ships: Attitudes of crews after one to two years of integration*

This research project provided Navy policy makers with an appraisal of gender integration in ships. A postintegration survey was developed and administered aboard 8 of the first 10 ships to receive women. Factor scores were generated for the 3,083 men and 382 women in the sample. These scores were subjected to several analyses of variance to investigate the effects of deployment, fleet, ship, department, paygrade, preparation for integration, and variables associated with individuals. The study found that: (1) attitudes in Pacific fleet ships were consistently more positive than those in Atlantic fleet ships, but deployment had no effect on factor scores; (2) strong ship and department effects were evident, and personnel who expressed negative attitudes prior to integration remained negative; (3) chief petty officers positively assessed the impact of women, (4) nonrated men were enthusiastic about integration, but petty officers preferred an all male crew; (5) many men felt women received preferential treatment; (6) personnel who received good preintegration training held more positive attitudes than those who had not; (7) individual variables (age, education, marital status, tenure) were weakly related to the factor scores; and (8) participant observers indicated that women were performing at least as well as men (except for jobs beyond their physical ability) and integration aboard ship was more complete than in shore stations.

NPRDC-TR-83-22

June 1983

AD-A131 061

Royle, M. H.

21. *First term attrition among Marine Corps women: Some associated factors*

In FY77, the first term attrition rate for enlisted Marine Corps women was nearly 50%, about twice that of comparable men. For this report, three data sets were analyzed to identify factors that might be related to attrition. They included historical master files and recruit accession management system files, a 3-year follow-up on a recruit training attrition study using expectations to predict attrition, and a job satisfaction survey. Results indicated that most of the difference in post recruit training attrition between men and women was due to pregnancy. Background variables were of limited use in predicting attrition. Factors associated with Marine Corps experience, particularly in the work setting, appeared to be related to attrition. The data did not support the hypothesis that women are becoming pregnant in order to be discharged.

NPRDC-TN-83-6

May 1983

**Spishock, P. M.
Scheifers, C. C.**

22. *The effects of performance evaluation narratives on the promotion of male and female unrestricted line (URL) officers*

In previous research, two pronoun-free officer fitness report (FitRep) narratives, one containing descriptors typical of a male and the other, descriptors typical of a female, were written and evaluated for promotion potential. Results showed that evaluators overwhelmingly selected the officer described by the male narrative. This study sought to determine whether prior knowledge of an individual's gender influences an evaluator's decision in choosing an officer for promotion based on the FitRep narrative portion. To do this, two forms, masculine and feminine, of the male and female archetype narratives were developed by inserting masculine or feminine pronouns as appropriate. Half of the evaluators (arbitrarily selected unrestricted line officers from all communities) were given the male archetype narrative with masculine pronouns and the female archetype narrative with female pronouns; and the other half, the male archetype narrative with feminine pronouns and the female archetype narrative with masculine pronouns. They were asked to evaluate the narratives and select one of the two officers described for promotion. Results showed that evaluators overwhelmingly selected the officer described by the male narrative, regardless of whether feminine or masculine pronouns were used. The findings suggest that competency factors as written in typical fitness reports of male officers have a positive effect for promotion of male and female officers.

NPRDC-TR-83-14
March 1983
AD-A127 197

Thomas, P. J.
Holms, B. L.
Carroll, L. L.

and

Beverly Hills: Sage (1987)
Thomas, P. J.

23. *Gender differences in the evaluation of narratives in officer performance ratings*

and

Appraising the performance of women: Gender and the naval officer. In B. A. Gutek & L. Larwood (Eds.), *Women's career development*

For this study, the narrative sections of the Fitness Reports (FitReps) for 239 unrestricted line officers were compared for gender differences. A content analysis was conducted and the descriptors applied to naval officers of each gender were tallied. Significance tests determined that the number and nature of some descriptors differed by gender. In addition, cluster and discriminate analyses of the traits appearing in the evaluations found men's evaluations to be significantly longer than women's, contain more comments about their combat potential and impact on the Navy, have more recommendations for future assignments, and use different words to describe their behavior. Men were seen as more qualified, logical, dynamic, mature, and aggressive than were women. Male officers were described as being effective in training others, physically fit, possessing the Navy image, having supportive wives, and improving their commands. Female officers were described as supporting equal opportunity (EO), appearing impeccable in uniform, and being an asset to their commands. Using the significant gender differences uncovered in the analyses, two pseudo-narratives were written without any gender-identifying pronouns—one describing a female lieutenant and the other a male lieutenant. Mid-level officers were asked to judge the promotability of the two pseudo-lieutenants and overwhelmingly chose the man.

NPRDC-TR-82-54
July 1982
AD-A118 484

Neumann, I.
Abrahams, N. M.

24. *Validation of Naval Academy selection procedures for female midshipmen*

Prior to July 1976, selection procedures at the U.S. Naval Academy (USNA) applied to an exclusively male population. This report describes research initiated to assess the appropriateness of these procedures for female midshipmen. Male and female midshipmen in the classes of 1980 through 1983 were compared to determine whether differences existed in mean predictor and performance scores and to assess the validity of predictors. The high voluntary resignation rate for

females, which was poorly predicted, led to the construction and validation of an interest inventory disenrollment scale that would better identify female midshipmen likely to resign from the USNA. Two experimental scales were constructed that were considerably more effective than the operational disenrollment scale.

NPRDC-TR-82-57

August 1982

AD-A119 787

**Greebler, C. S.
Thomas, P. J.
Kuczynski, J. D.**

25. *Men and women in ships: Preconceptions of the crews*

Attitudes and expectations of 1,936 men and 346 women assigned to six Navy ships were measured before the women reported aboard. Results showed that the majority of men believed integration would improve crew morale, but would impact negatively on discipline and increase interpersonal conflict. Lower ranking men favored integration, although they held the most traditional attitudes toward the roles of women and expected women would receive preferential treatment in job assignments, physically demanding work, and disciplinary action. Men working in departments where women were rarely found held traditional attitudes toward women's roles and were pessimistic about integration. The women were most concerned with profanity, proving themselves, and resentment from men.

NPRDC-TR-82-50

July 1982

AD-A118 392

**Thomas, P. J.
Monda, M. J.
Mills, S. H.
Mathis, J. A.**

26. *Navy women in traditional and nontraditional jobs: A comparison of satisfaction, attrition, and reenlistment*

Samples of about 1,000 men and 1,000 women who joined the Navy in 1975 were followed throughout their first enlistment. In this final report, the effects of gender, type of job, and gender ratio in work group upon attrition, satisfaction, advancement, migration, and reenlistment of women were investigated. Whenever possible, comparisons were made to men's rates. Results showed that gender composition of work group was not related to the dependent measures. Also, being assigned to a job traditional to one's gender was not related to women's satisfaction and work behavior but it was significantly related to men's attrition, advancement, and reenlistment. No differences were found in women's and men's rates of attrition, advancement, or migration to another type of job.

NPRDC-TR-82-42

April 1982

AD-A114 247

Robertson, D. W.

27. *Development of an occupational strength test battery (STB)*

This report describes a strength test battery (STB) developed to predict ability to perform on Navy job tasks with substantial muscular demands. The STB includes 14 tests representing four strength factors: static, dynamic, power, and anthropometric. The STB was administered to men and women recruits and evaluated for battery administration time, differences in men's

and women's scores, relationship between strength and body weight, sensitivity of the STB to measure changes resulting from physical conditioning, and the tests' validity and reliability. Results indicate that the STB provides a safe, quick, inexpensive method for measuring an applicant's strength capability, and for monitoring strength and body weight changes that result from physical conditioning activities.

NPRDC-TR-82-23
January 1982
AD-A110 116

Durning, K. P.

28. *How enlisted women and men view the Navy organization*

This report discusses the responses of over 40,000 Navy enlisted women and men to the Human Resource Management (HRM) Survey. Results of analyses replicated those of a 1975 study, disclosing that although women were initially optimistic, their perceptions of the Navy became more negative than men's. Midgrade women (E-4 through E-6) were less positive than men on peer relations, command human resources emphasis, and person/organization goal integration. However, female chief petty officers, were as positive as their male counterparts on these measures. On perceptions of supervisory adequacy, E-1 to E-3 women were as positive as comparable men, but less positive than E-4 through E-9 were. This was also true of responses to items assessing motivation, the influence exerted by lower levels on decision making, and equal opportunity practices within the command. Women showed less positive perceptions of Navy life than they had in 1975, and men showed more positive perceptions. Results are discussed in terms of supervision and peer relations of women in male dominated work groups and of inflated expectations women may have built up during recruitment and basic training.

Defense Management Journal,
18(2), 18-25 (1982)

Hoiberg, A.
Thomas, P. J.

29. *The economics of sex integration: An update of Binkin and Bach*

Greater numbers of women in uniform have had an impact on the military in several key areas. One of these is cost, and this article examines some of the financial implications of sex integration in the armed forces. Specifically, the authors considered costs for 1975 Navy enlistees in four areas: dependents, absenteeism, recruiting, and attrition. While results in individual categories varied, women in the 1975 group generally proved to be less costly than men.

NPRDC-TR-82-32
February 1982
AD-A111 423

Pope, L. T.

NPRDC-TN-81-13
May 1981
AD-A116 429

Thomas, P. J.

NPRDC-TR-81-14
July 1981
AD-A102 701

Nieva, V. F.
Mallamad, S. M.
Eisner, E. J.
Mills, S. M.
Thomas, P. J.

30. *Male and female performance in ten traditionally male Navy ratings*

For this paper, 979 people (802 men and 177 women; 887 whites and 92 blacks) participated in a study of sex-race bias. They rated the performance of members of their work group, and completed attitude and opinion questionnaires. Comparison of peer ratings showed that the perceived overall performance of women was not significantly different from that of men. When paygrade and rating were considered, the performance of blacks was not substantially different from that of whites.

31. *Women in the military: Gender integration at sea*

This report describes an effort to measure and observe factors thought to be associated with the process of integrating women into the crews of Navy ships. The study focused on certain personal interactions that were believed to occur in a gender-skewed organization. Four ships were given the preintegration form of the Navy in Transition Survey. One of these ships was resurveyed 9 months after integration. In addition, Navy reservists collected observational data on interactions aboard six ships. Responses to the preintegration and postintegration surveys were analyzed to determine how attitudes were affected by gender, age, education, paygrade, ship, and shipboard department. The attitudes measured in the preintegration survey were highly related to both the individual and organizational variables of interest. Although nonrated men held the most traditional beliefs about women's roles in the work place, they liked working with women more than did any other group. On the postintegration survey, petty officers were the least positive of any group about the success of integration. Department effects were also evident. Women felt more performance pressure than men and experienced more problems aboard ship.

32. *Performance evaluation narratives of Navy women and men: An examination for bias in promotion*

This report compared the narrative sections of performance ratings for 52 men and 52 women eligible for promotion to chief petty officer. The purpose was to determine whether statements included in the narrative section or manner in which the statements were interpreted by the selection board were subject to gender bias. Results showed that there was no significant difference in the number of positive statements made on the performance of men and women. However, significant interactions between sex and selection status (selected for promotion or not selected) were found in two evaluation

categories: (1) motivation and personality traits and (2) dimensions of concern to the Navy (awards, oral communication skills, appearance). Women who were not selected had more positive statements related to motivation and personality than did either men or women who were selected, indicating that positive performance in this dimension did not enhance promotion prospects. Men who were not selected had more positive statements on dimensions of concern to the Navy than men who were selected.

NPRDC-TR-80-31

August 1980

AD-A088 214

Borack, J. I.

33. Forecasting the supply of women available to the Navy

To gain insight into and obtain estimates of the relative size of the potential female and male military supply pool, health survey data, mental aptitude data, and demographic data were analyzed. The population of females and males, 17 to 24 years old, was successively decremented by estimates of the population of these individuals not available for military service due to physical/medical, mental, or family status reasons. Additionally, individuals not interested in military service were deleted from the estimated supply pool.

NPRDC-TN-80-17

June 1980

Thomas, P. J.

34. Factors affecting the management of Navy women

The plan to double the number of women in the Navy between 1980 and 1985 raised a number of questions for policy makers. First, would enough women enlist to meet this goal and would they opt for jobs where male shortages were acute? Second, were the psychological and physiological characteristics of women as a group consistent with naval service? Third, was it cost effective to substitute women for men on this scale? This paper reviewed military research literature relevant to these issues. The available literature suggested that women's propensity to enlist was equal to that of men. However, their occupational preferences were untested because of past and current restrictions on their assignment. Psychological differences between men and women were not established, except for gender differences in aptitude patterns resulting from the Navy's test battery. Pregnancy and its conjectured effect on productivity were discussed. Cost effectiveness data were presented and it was concluded that women are not more expensive to acquire, sustain, and retire than men.

***U.S. Navy Yearbook Of
Manpower, Personnel and
Training, 1(1), 15-22 (1980)***

Thomas, P. J.

35. Issues in the management of women in the Navy

Increased use of women in the Navy gave salience to the problem that most Navy personnel policies have evolved based on men and are not necessarily applicable to women. This article discusses problems and implications of the gender-specific

regulations and policies that influence the organizational behavior of women.

NPRDC-TR-80-10

January 1980

AD-A079 630

Thomas, P. J.

Durning, K. P.

36. Role affiliation and attitudes of Navy wives

The study documented in this report investigated Navy wives' acceptance of social obligations associated with a military marriage, measured their attitudes toward the increased utilization of Navy women, and determined whether they hold traditional or contemporary beliefs about the role of women. A questionnaire was designed and administered to 463 wives associated with aviation commands throughout the Pacific. Items on women's roles were also administered to a sample of 482 Navy active duty women. Comparisons were made between the responses of officers' wives (OW) and enlisted men's wives (EW), and between responses of Navy wives and Navy women. Also, analyses were conducted to see how responses related to education, number of children, employment status, years with the Navy, and age. Responses of OW and EW to items measuring attitudes toward social life and military commitment were very similar. Only 4 of the 28 questions yielded significant differences. The feminine role orientation of the two groups of wives was similar, half subscribing to a contemporary role, 40% choosing a traditional role, and 10% undecided. However, officer wives gave fewer traditional responses to women's role items than did EW. Education was significantly related to these attitudes. Female officers gave more contemporary responses than officers' wives, but the comparison of responses of enlisted men's wives and enlisted Navy women yielded mixed results. Less than 10% of OW and EW felt very negative about women being on their husbands' ships, although an additional 16% of OW and 34% of EW did not think they would like the situation.

Defense Management Journal,

16(2), 43-49 (1980)

AD-A079 630

Thomas, P. J.

37. Attrition among Navy enlisted women

In the struggle to maintain an adequate enlisted force, the military services investigated ways to reduce high attrition. To this end, Navy policy makers examined factors that contribute to attrition among women. This article focuses on the results of several surveys, including a longitudinal study that tracked 1,000 Navy recruits for 41 months.

NPRDC-SR-78-10
May 1978

Thomas, P. J.

and

*JSAS Catalog of Selected
Documents in Psychology,
11, 32 (1978)*

Thomas, P. J.

*Youth and Society, 10(2),
135-158 (1978)*

Thomas, P. J.
Durning, K. P.

38. *Role of women in the military: Australia, Canada, the
United Kingdom, and the United States*

and

*Role of women in the military: Australia, Canada, the
United Kingdom, and the United States*

This report reviewed the research conducted in major English speaking nations on the women in their armed forces. Because of the similar roots and social evolution of these countries, issues of mutual concern are inevitable. The research papers were organized into five topical areas: Enlistment, Attrition/Retention, Attitudes Impinging on Assignment, Interpersonal Factors, and Utilization and Job Performance. A short historical overview and a description of the more important sex-specific laws and regulations are included to foster understanding of the antecedent events and constraints affecting the utilization of women in the armed forces of Australia, Canada, the United Kingdom, and the United States.

39. *The young Navy woman: Her work and role orientation*

This article describes a study that identified the factors influencing young women to enlist in the Navy, and determined whether young men making the Navy their occupational choice differ on these factors. Because so many popularly held preconceptions about differences between the sexes are no longer tenable, it was hypothesized that no significant differences in these enlistment variables for women and men would be found. Aptitude and education level were not considered in the study because the selection criteria applied to women were, by service regulations, higher than those applied to men (e.g., women had to be high school graduates). A secondary objective was to study sex role attitudes held by junior enlisted women in the Navy; that is, to determine whether they manifest a traditional or contemporary (equalitarian) orientation towards women's roles.

NPRDC-TR-78-35
September 1978
AD-A061 321

Olson, M. S.
Stumpf, S. S.

40. *Pregnancy in the Navy: Impact on absenteeism, attrition, and work group morale*

Because of objections in the late 1970s to the optional discharge and leave provisions of the Navy's pregnancy policy, a study was conducted to determine the impact of pregnancy on Navy absenteeism, attrition, and work group productivity and morale. This report discusses data obtained by analyzing administrative records, conducting a survey, and interviewing an aviation squadron sample. Results show that abolishment of the optional discharge policy for pregnancy would increase the number of lost days by women, lower women's attrition rates, and increase the impact of pregnancy on work group productivity and morale. Further, if mandatory discharge for pregnancy were reinstated, it would decrease female absenteeism, increase female attrition, and increase work group turn over. Finally, if the postpartum leave provision were changed, it could reduce work group efficiency, while not improving morale of male Navy members, since interview results showed that most were not aware of the policy.

NPRDC-TR-78-34
September 1978
AD-A060 104

Borack, J. I.

41. *Intentions of women (18-25 years old) to join the military: Results of a national survey*

In anticipation of the projected decline in the national population of young men in the early 1980s, defense planners gave increased thought to expanding the role of women in the military. A survey was conducted to gauge the interests of women and men in joining the military under conditions in effect at that time and under three alternative options involving greater utilization of women. These options related to the expansion of the role of women in terms of both the physical location (ships, aircraft, combat zones) and nontraditional job classifications (mechanics, electronics) where they were likely to serve. Findings are presented regarding the percentage of women and men interested in joining the military under each alternative. The composition of the pool of interested women was also analyzed in terms of demographic and attitudinal components.

NPRDC-TR-78-28
July 1978
AD-A060 104

Olson, M. S.
Thomas, P. J.

42. *Preenlistment drug experiences of Navy women and men: A comparison*

This report describes a study that replicated, with female respondents, a 1975 survey of male preservice substance abuse and its correlates. The Navy's Drug Experiences Questionnaire (DEQ) was administered in June 1976 to 519 women at Recruit Training Command, Orlando, FL. Responses were compared to

those of the 1975 male sample. Results showed that female and male preservice drug experiences were similar. No significant differences were found in the proportions of female and male (49.8% vs. 47.0%, respectively) nondrug users, marijuana-only users (22.2% vs. 25.8%), and other drug users (28.0% vs. 27.2%). However, upon analyzing the "other drug" category in more detail, significantly more men than women were found to have used hallucinogens, such as LSD, STP, and DMT. The relationships between substance abuse and racial or ethnic membership, age, high school grades, level of education, geographic origin, size of hometown, and preservice delinquency were similar for both sexes. However, frequency of drunkenness during the previous year was significantly higher for men than women.

NPRDC-TR-78-12
February 1978
AD-A052 878

Durning, K. P.

and

Armed Forces and Society, 4(4)
569-588 (1978)

Durning, K. P.

43. *Women at the Naval Academy: The first year of integration*

and

Women at the Naval Academy: An attitude survey

These papers describe a study of the first year of integration of women midshipmen at the U.S. Naval Academy (USNA). The degree of traditionalism of males of the Class of 1980 toward rights and roles of women in society was evaluated as a function of level of contact with female plebes. A small effect on the Attitudes Toward Women Scale was found after 5 months of integration, with men in mixed sex platoons or squads expressing the most equalitarian attitudes. Regardless of company assignment, the male plebes became more equalitarian by the end of the academic year. In general, these men were least equalitarian in areas that would affect them most closely as naval officers, as in their opinions about shipboard and other military roles for women. Upperclassmen were most resistant to the integration of USNA. Females and males had very different perceptions of treatment of the sexes in the 1976-1977 year, with the majority of men perceiving favoritism to women, and women denying they received such treatment, except perhaps in the area of physical education. Women generally felt resented and less accepted than male peers.

Armed Forces and Society, 4(4),
623-645 (1978)

Thomas, P. J.

44. *Women in the military: America and the British Commonwealth*

Throughout the twentieth century, whenever the armed forces have been faced with a critical shortage of personnel, women have gained access to jobs formerly closed to them. At the end of the crisis, they were either mustered out of the service or again restricted to occupational specialties considered appropriate to their gender. In the late 1970s, the Department of Defense authorized an increase in the numbers of women that was unprecedented in a peacetime military. The manpower crisis was engendered by a persistently declining birthrate, not the exigencies of war. This review focuses on the American armed forces, but also includes information on the militaries of Great Britain, Canada, and Australia because of the cultural similarities between these countries and the United States.

NPRDC-TR-77-20
March 1977
AD-A037 340

Thomas, P. J.

45. *Why women enlist: The Navy as an occupational choice*

This report describes a study that used an experimental questionnaire to assess the background, motivation for enlistment, and occupational values of 1,000 recruits of each sex. The results indicate that women and men entering the Navy have different backgrounds but enlist for the same reason (i.e., to make something of their lives, to acquire education and training, and to travel). The sexes differed, however, on two thirds of the occupational value items. Men were more interested in getting ahead in their jobs and women placed a higher value on a clean, cheerful environment and in helping others. Women, also, were more negative than men towards jobs involving work with materials or machines rather than people, a physical risk, and monotony. The values of many of the women were not consistent with the nontraditional jobs to which they were apt to be assigned.

Santa Monica: Rand
Corporation (1979)

Thomas, P. J.

46. *Enlisted women in the military. In R. V. L. Cooper (Ed.), Defense manpower policy: Presentations from the 1976 Rand Conference on defense manpower*

The increased utilization of women by the military created unique problems in procurement, training, and management. Some of these problems were engendered by the basic incompatibilities between traditionally masculine services and the values of American women. Others arose when military men were required to interact with women as supervisors, peers, and subordinates. Prior to the 1970s, the number of active-duty women never exceeded 2% of the total military force. Therefore, the services were not prepared to deal with either the

100% increase in woman power achieved in 1975 or the impact that the passage that the Equal Rights Amendment portended for the future. The experiences of foreign services and certain civilian communities (e.g., oceanographic research) were examined for policy considerations concerning the integration of women. In addition, case histories of military commands were developed to investigate how organizational and personal conflicts were resolved when women were introduced into a previously all-male environment.

NPRDC-TR-76TQ-43
August 1976
AD-A029 756

Durning, K. P.
Mumford, S. J.

47. *Differential perceptions of organizational climate held by Navy enlisted women and men*

Using data obtained from the Human Resource Management (HRM) Survey, this study addressed the interaction of sex and paygrade on organizational climate dimensions for 24,033 nonrated and rated shore personnel. Results show that women had an initial tendency to respond optimistically on the HRM survey. However, as they advanced to petty officer levels, women became disproportionately disillusioned on certain dimensions. With increase in paygrade, women appeared to feel less a part of the work group team, whereas the opposite trend was true for men. Results are discussed in terms of the solo woman in work groups, expectations women built up during recruitment and basic training, role conflict, and possible "fear of success" in competitive situations as women advance in their careers.

NPRDC-TN-76-7
May 1976
AD-A061 564

Thomas, P. J.

48. *Utilization of enlisted women in the military*

The purpose of this paper was to review the status of American military women from a historical perspective and determine what effect changes in policy have had on their utilization. Comparisons were made between the role of women in the Israeli Defense Force and in the U.S. military. The attitudes of military men concerning women's place in society, job relevant stereotypes, and women in combat are described. Data reporting the occupational goals of women enlisting in the Navy and the apparent disillusionment of female petty officers are presented. Case histories of the integration of Navy women into formerly all male work groups are discussed. This review suggests that, until the laws and regulations preventing full utilization of female personnel are replaced or reinterpreted, military women will experience a dissonance between their expectations and experiences.

Distribution List

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(35)

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